Claims

[c1]   1. A method for interactive content retrieval and display, the method comprising:

providing a plurality of portlets for retrieval of content for display in a user interface;

mapping a message action to a first portlet to create a messaging portlet for sending a message in response to user interaction with the messaging portlet;

creating a listener portlet by registering a second portlet to receive messages from the messaging portlet; and

in response to user interaction with the messaging portlet, retrieving particular content for display in the user interface based on the message received by the listener portlet from the messaging portlet.

[c2]   2. The method of claim 1, wherein said plurality of portlets comprise a portal.

[c3]   3. The method of claim 1, wherein a portlet retrieves content from a particular source.

[c4]   4. The method of claim 1, wherein a portlet displays content in a Web page.

[c5]   5. The method of claim 4, wherein the Web page is implemented using a markup language.

[c6]   6. The method of claim 5, wherein the markup language comprises a selected one of HyperText Markup Language (HTML), Extensible Markup Language (XML), Extensible Hypertext Markup Language (XHTML), and Compact HyperText Markup Language (cHTML).

[c7]   7. The method of claim 1, wherein the first portlet comprises a markup language anchor.

[c8]   8. The method of claim 1, wherein said retrieving step includes retrieving a selected one of a Web page, a portion of a Web page, database content, spreadsheet data, documents, files, and information from a Common Gateway Interface.

[c9]   9. The method of claim 1, wherein said user interface comprises a browser interface.

[c10]   10. The method of claim 1, wherein said messaging portlet is structured as a HyperText Markup Language (HTML) inline frame.

[c11]   11. The method of claim 1, wherein the listener portlet is structured as a HyperText Markup Language (HTML) inline frame.

[c12]   12. The method of claim 1, wherein the listener portlet registers with a registrar to receive the message from the messaging portlet.

[c13]   13. The method of claim 12, wherein said registrar is located in a browser window.

[c14]   14. The method of claim 13, wherein the browser window comprises a topmost browser window of a Web page.

[c15]   15. The method of claim 1, wherein said messaging portlet is implemented using JavaScript.

[c16]   16. The method of claim 1, wherein the messaging portlet sends a JavaScript broadcast message to the listener portlet.

[c17]   17. The method of claim 1, wherein the message received from said messaging portlet comprises a selected one of an identifier, text, or an attribute.

[c18]   18. The method of claim 1, further comprising:
creating a second listener portlet by registering a third portlet to receive messages from said messaging portlet; and
in response to user interaction with said messaging portlet, retrieving particular content for display in the

user interface based on the message received by the second listener portlet from the messaging portlet.

[c19]   19. The method of claim 1, further comprising:

mapping a message action to the listener portlet;

creating a second listener portlet by registering a third portlet to listen for messages from the listener portlet; and

in response to the message received by the listener portlet from the messaging portlet, retrieving particular content for display in the user interface based on the message received by the second listener portlet from the listener portlet.

[c20]   20. A computer-readable medium having processor-executable instructions for performing the method of claim 1.

[c21]   21. A downloadable set of processor-executable instructions for performing the method of claim 1.

[c22]   22. A system for interactive content retrieval and display, the system comprising:

a user interface for display of content;

an actioner module for display of content in the user interface and sending a message based on user interaction with said actioner module;

a registrar for receiving the message from said actioner module and routing the message to at least one listener module registered to receive the message; and

at least one listener module registered for receiving the message from the registrar and retrieving content for display in the user interface based on the message sent by the actioner module.

[c23] 23. The system of claim 22, wherein said actioner module comprises a portlet.

[c24] 24. The system of claim 23, wherein said portlet retrieves content from a particular source.

[c25] 25. The system of claim 22, wherein at least one listener module displays content in a Web page.

[c26] 26. The system of claim 25, wherein the Web page is implemented using a markup language.

[c27] 27. The system of claim 26, wherein the markup language comprises a selected one of HyperText Markup Language (HTML), Extensible Markup Language (XML), Extensible Hypertext Markup Language (XHTML), and Compact HyperText Markup Language (cHTML).

[c28] 28. The system of claim 22, wherein said actioner module comprises a markup language anchor.

[c29]   29. The system of claim 22, wherein said at least one lis-
tener module retrieves a selected one of a Web page, a
portion of a Web page, database content, spreadsheet
data, documents, files, and information from a Common
Gateway Interface.

[c30]   30. The system of claim 22, wherein said user interface
comprises a browser interface.

[c31]   31. The system of claim 22, wherein said actioner mod-
ule is structured as a HyperText Markup Language
(HTML) inline frame.

[c32]   32. The system of claim 22, wherein said at least one lis-
tener module is structured as a HyperText Markup Lan-
guage (HTML) inline frame.

[c33]   33. The system of claim 22, wherein said at least one lis-
tener module registers with the registrar to receive the
message from the actioner module.

[c34]   34. The system of claim 33, wherein the registrar is lo-
cated in a browser window.

[c35]   35. The system of claim 34, wherein the browser window
comprises a topmost browser window of a Web page.

[c36]   36. The system of claim 22, wherein said actioner mod-

ule is implemented using JavaScript.

[c37]   37. The system of claim 22, wherein the actioner module sends a JavaScript broadcast message in response to user interaction.

[c38]   38. The system of claim 22, wherein the message received by said at least one listener module comprises a selected one of an identifier, text, or an attribute.

[c39]   39. The system of claim 22, further comprising:
a module for mapping a message action to the actioner portlet.

[c40]   40. The system of claim 22, further comprising:
a listener messaging module registered to receive the message from the actioner module and send a message based on the message received from the actioner module.

[c41]   41. The system of claim 40, wherein said listener messaging module retrieves content for display in the user interface based on the message sent by the actioner module.

[c42]   42. A method for collaborative retrieval and display of information in a Web page, the method comprising:
providing a plurality of elements for retrieval and display

of information in a Web page;

creating a registrar for receiving a message and routing the message to at least one listening element registered to receive the message;

associating a message action with a first element for sending a message in response to user interaction with the first element;

registering at least one listener element with the registrar for receiving a message sent by the first element; and

in response to user interaction with the first element, displaying particular information on the Web page based on the message received by said at least one listener element from the first element.

[c43] 43. The method of claim 42, wherein said plurality of elements comprise a portal.

[c44] 44. The method of claim 42, wherein an element retrieves information from a particular source.

[c45] 45. The method of claim 42, wherein an element comprises a markup language element.

[c46] 46. The method of claim 42, wherein the first element comprises a markup language anchor.

[c47] 47. The method of claim 42, wherein said displaying

step includes displaying a selected one of a Web page, a portion of a Web page, database content, spreadsheet data, documents, files, and information from a Common Gateway Interface.

[c48] 48. The method of claim 42, wherein said Web page is displayed by a Web browser.

[c49] 49. The method of claim 42, wherein said first element is structured as a HyperText Markup Language (HTML) in-line frame.

[c50] 50. The method of claim 42, wherein said at least one collaborative element is structured as a HyperText Markup Language (HTML) inline frame.

[c51] 51. The method of claim 42, wherein said creating a reg-istrar step includes creating the registrar in a browser window.

[c52] 52. The method of claim 51, wherein the browser win-dow comprises a topmost browser window of a Web page.

[c53] 53. The method of claim 42, wherein the first element sends a JavaScript broadcast message in response to user interaction.

[c54] 54. The method of claim 42, wherein the message re-

ceived by said at least one listener element comprises a selected one of an identifier, text, or an attribute.

[c55] 55. The method of claim 42, wherein the first element comprises a listening element registered to receive a message from a particular element on the Web page.

[c56] 56. The method of claim 55, wherein the first element sends a message when it receives a message from said particular element.

[c57] 57. The method of claim 42, wherein at least some of said listener elements have associated message actions for sending messages to other elements.

[c58] 58. A computer-readable medium having processor-executable instructions for performing the method of claim 42.

[c59] 59. A downloadable set of processor-executable instructions for performing the method of claim 42.